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Amendment and Response to Office Action
Mailed April 24, 2007

REMARKS

In the Office Action, the Examiner rejected claims 1-26, and 31-34, and indicated claims 27 and 28 as being allowed. Applicants thank the Examiner for indicating the allowable subject matter. Claims 1, 8, 14, 21, and 31 have been amended to clarify certain aspects of the claimed subject matter. Accordingly, claims 1-28 and 31-34 are pending. In view of the amendments, Applicants respectfully request reconsideration and allowance of all pending claims.

Claim Rejections under 35 U.S.C. § 101

The Examiner rejected claims 8-20 under 35 U.S.C. § 101 because the claimed invention is directed to non-statutory subject matter. Specifically, the Examiner stated:

Claim 8, 14 direct to a security module which is a software/program (see specification's paragraph 21, lines 1-2). Therefore, the claimed invention is directed to non-statutory subject matter.

Office Action, page 2. Applicants respectfully traverse this rejection.

Legal Precedent

Statutory subject matter, as set forth in Section 101, includes "any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof." 35 U.S.C. § 101. As such, according to the Supreme Court, congress intended statutory subject matter to "include anything under the sun that is made by man." *Diamond v. Chakrabarty*, 447 U.S. 303, 308-09; 206 U.S.P.Q. 193, 197 (1980). In particular, it is clear that claims directed to products, apparatuses and devices are clearly statutorily patentable. As set forth in M.P.E.P § 2106(II)(c), "For products, the claim limitations will define discrete

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physical structures or materials. Product claims are claims that are directed to either machines, manufactures or compositions of matter.”

Additionally, the Federal Circuit has developed a test which may be used to determine if a claim recites statutory subject matter, namely whether the claim produces a “useful, concrete, and tangible result.” *In re Alappat*, 31 U.S.P.Q.2d 1545, 1557 (Fed. Cir. 1994) (*en banc*). The Federal Circuit has stated “the dispositive inquiry is whether the claim *as a whole* is directed to statutory subject matter.” *Id.* The Federal Circuit elaborated by holding that one must look to “the essential characteristics of the subject matter, in particular, its practical utility.” *State Street Bank & Trust Co. v. Signature Financial Group Inc.*, 47 U.S.P.Q.2d 1596, 1602 (Fed. Cir. 1998). Moreover, the Federal Circuit has stated “the *Alappat* inquiry simply requires an examination of the contested claims to see if the claimed subject matter *as a whole* is a disembodied mathematical concept representing nothing more than a ‘law of nature’ or an ‘abstract idea,’ or if the mathematical concept has been reduced to *some practical application rendering it ‘useful.’*” *AT&T Corp. v. Excel Communications, Inc.*, 50 U.S.P.Q.2d 1447, 1451 (Fed. Cir. 1999) (emphasis added). In other words, “Is an actual process machine, manufacture, or composition of matter being claimed in accordance with 35 U.S.C. §101, or is the claim drawn to an abstraction?” Therefore, if a claim, read as a whole and in light of the specification, produces any useful, concrete, and tangible result, the claim meets the statutory requirements of Section 101. *See id*

Applicants respectfully assert that claims 8 and 14 are directed to statutory subject matter under Section 101, as they are directed to apparatuses and recite discrete physical structures. In particular, independent claims 8 and 14 are each directed to “[a] first security

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module in a computer” and recite discrete physical structures in the bodies of the respective claims. Specifically, the body of claim 8 recites, “*a detector that is adapted to detect another security module...and a device that obtains at least one key.*” (Emphasis added). The body of claim 14 recites, “*means for detecting another security module...means for determining whether a key associated with the other security module is stored at the first security module; and means for obtaining the key.*” (Emphasis added). Moreover, the specification clearly describes the security modules as including physical structure. *See, e.g.*, FIG. 3; paragraph 28, lines 3-4 (stating “the first TPM 143 may include an input/output interface, a *processor*, and a *memory* 156 that is used to store TPM keys 158” (Emphasis added)). Accordingly, the subject matter of independent claims 8 and 14 clearly contemplated to include tangible hardware elements, as well as software.

The Examiner’s rejection seems based on a presumption that, because certain elements of the claimed invention may comprise software, that independent claims 8 and 14, and the claims dependent thereon, are non-statutory. This presumption is not correct. The Commissioner of Patents has recognized the patentability of software, provided that it is embodied in a tangible medium. Indeed, the Commissioner has directly stated that, “computer programs embodied in a tangible medium...are patentable subject matter under 35 U.S.C. §101.” *See In re Beauregard*, 53 F.3d 1583 (Fed Cir. 1995). It is clear from the specification that, to the extent the claimed security modules comprise software, the security modules are intended to be implemented in a tangible medium. In particular, the specification describes a first security module that includes NVRAM 140 (FIG. 3) and a second security module that includes a memory 160 (FIG. 3). Those of ordinary skill in the

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art would clearly recognize the NVRAM 140 and the memory 160 as tangible media.

Because the specification clearly supports the software implementation of security modules in a tangible machine-readable medium, the Applicants' claims are statutory under the governing law of the Federal Circuit.

In summary, Applicants respectfully assert that independent claims 8 and 14 are statutory because they are directed to either physical apparatuses or software that is stored on a tangible medium. As such, Applicants respectfully request withdrawal of the rejection of independent claims 8 and 14, as well as the rejection of all claims dependent thereon, under 35 U.S.C. § 101.

Claim Rejections under 35 U.S.C. § 103

The Examiner rejected claims 1-26, 31, and 32 under 35 U.S.C. § 103 (a) as being unpatentable over Timson et al (U.S. Patent No. 6,041,412) (hereinafter "Timson") in view of Challenger (U.S. Pub. 2003/0174842) (hereinafter "Challenger"). Specifically, the Examiner stated:

Claims 1-26, 31, 32 are rejected under 35 U.S.C. 103(a) as being unpatentable over Timson et al (6041412) in view of Challenger (US Pub 2003/0174842). As in claim 1, Timson discloses a method to operating security modules in a computer (Timson's Fig. 1: #2 CPU corresponding to the claim's computer, two security modules (Fig 1: #50, #60, Fig 2: #8, dual secure data modules; column 8, lines 48-65) attaching locally to the computer. Timson does not disclose the claim's detail acts associating with the security modules, However, Challenger '842 describes a method for storing private key of one security in another security module using establish standard such as TCPA (Challenger's paragraph 6, lines 1-10) comprising the acts of detecting a second security module in the computer; determining whether a key associated with the second security module is available to the first module (Challenger '842's paragraph 28, Fig 3: #54 query whether user's private key is

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stored on the TCM server, Fig 1: #40 that corresponds to the claim's first security module); and obtaining the key associated with the second security module is the key associated with the second security module is not stored at the first security module (Challener '842's paragraph 28, server obtains the private key from the client's security module, Fig 1: #54 that corresponds to the claim's second secure module, Fig 1: #22; Challener's paragraph 12 discloses that the first security module, TCM server Fig 1: #40, obtaining the private key associating with the second security module, Fig 1: #22, and providing this key information to a client/user. Obviously, if this key has not been stored at the first security module, the first security module, server, will obtain it from the client's computer and save it for future referencing, in a migrating manner, see Fig. 4a, and paragraph 32).

It would have been obvious to one of ordinary skill in the art at the time of invention to include the method and associating apparatus for storing private key of one security in another security module using establish standard such as TCPA, thereby the private key of one security module can be retrieved from another security safely with any computers enable with established standard such as TCPA (see Challener's paragraph 8).

Office Action, pages 3 and 4. Applicants respectfully traverse this rejection.

Legal Precedent

The burden of establishing a *prima facie* case of obviousness falls on the Examiner.

Ex parte Wolters and Kuypers, 214 U.S.P.Q. 735 (PTO Bd. App. 1979). In addressing obviousness determinations under 35 U.S.C. § 103, the Supreme Court in *KSR International Co. v. Teleflex Inc.*, No. 04-1350 (April 30, 2007), reaffirmed many of its precedents relating to obviousness including its holding in *Graham v. John Deere Co.*, 383 U.S. 1 (1966). In *Graham*, the Court set out an objective analysis for applying the statutory language of §103:

Under §103, the scope and content of the prior art are to be determined, differences between the prior art and the claims at issue are to be ascertained, and the level of ordinary skill in the

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pertinent art are to be resolved. Against this background the obviousness or non-obviousness of the subject matter is to be determined. Such secondary considerations as commercial success, long-felt but unresolved needs, failure of others, etc., might be utilized to give light to the circumstances surrounding the origin of the subject matter sought to be patented.

KSR, slip op. at 2 (citing *Graham*, 383 U.S. at 17-18).

The Court also stated that "a patent composed of several elements is not proved obvious merely by demonstrating that each of its elements was, independently, known in the prior art." *Id.* at 14. Furthermore, the *KSR* court stated:

Often, it will be necessary for a court to look to interrelated teachings of multiple patents; the effects of demands known to the design community or present in the marketplace; and the background knowledge possessed by a person having ordinary skill in the art all in order to determine whether there was an apparent reason to combine in the known elements in the fashion claimed in the patent at issue.

Id.

Furthermore, the *KSR* court reaffirmed the requirement for objective evidence of obviousness. *Id.* at 14 ("To facilitate review, this analysis should be made explicit. See *In re Kahn*, 441 F.3d 977, 988 (CA Fed. 2006) ("[R]ejections on obviousness grounds cannot be sustained by mere conclusory statements; instead, there must be some articulated reasoning with some rational underpinning to support the legal conclusion of obviousness"). As our precedents make clear, however, the analysis need not seek out precise teachings directed to the specific subject matter of the challenged claim, for a court can take account of the inferences and creative steps that a person of ordinary skill in the art would employ."); see also, *In re Lee*, 61 U.S.P.Q.2d 1430, 1436 (Fed. Cir. 2002) (holding that the factual inquiry

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whether to combine references must be thorough and searching, and that it must be based on *objective evidence of record*).

Turning to the claims, amended independent claim 1 recites a method of operating a first security module in a computer comprising, *inter alia*, “detecting a second security module in the computer, wherein *the second security module is configured to perform the same functions as the first security module*.” (Emphasis added). Amended independent claim 8 recites a first security module comprising “a detector that is adapted to detect another security module *configured to perform the same functions as the first security module*.” (Emphasis added). Amended independent claim 14 recites a first security module comprising “means for detecting another security module in the computer, wherein *the other security module is configured to perform the same functions as the first security module*.” (Emphasis added). Amended independent claims 21 and 31 both recite a computer comprising, *inter alia*, “a first security module; and a second security module, wherein *the second security module is configured to perform the same functions as the first security module*.” (Emphasis added).

In contrast, neither Timson nor Challenger disclose two security modules *configured to perform the same functions in a computer*. While Timson depicts two security modules, the modules perform totally distinct functions. Specifically, to provide access to secured data, the dual secure data module reader of Timson uses “at least two secure data modules” which “include [1] *an enabling module* and [2] *an interrogatable module*.” Timson, column 2, lines 16, 20-21 (emphasis added). The enabling module contains “permissions” which determine

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which data operations, such as "creating data, deleting data, reading data," etc., may be performed on an interrogatable module. Timson, column 2, lines 40-49. In contrast, the interrogatable module contains the operable data. See Timson, column 2, lines 50-61. Accessing secured data thus requires (1) permission from an enabling module and (2) operable data from an interrogatable module, where the two different modules perform different functions and communicate through a dual secure data module reader. Timson, column 2, line 62 to column 3, line 4; Fig. 1. As such, each module performs different and distinct functions and both must be used in conjunction to access secured data. See Timson, column 2, line 13 to column 4, line 15. Accordingly, the dual secure data module reader depicted in Fig. 1 of Timson does not disclose two security modules configured to perform the same functions, as set forth in the instant claims.

Moreover, Challenger fails to disclose multiple security modules configured to perform the same functions in a computer. The Challenger reference discloses modules being located in two separate and distinct computers. See Challenger, Fig. 1. However, the Challenger reference does not disclose anything with respect to multiple security modules in the same computer, much less wherein the modules are configured to perform the same functions in the same computer. Since Challenger does not disclose any information that obviates the claimed elements lacking in Timson, Timson and Challenger, taken alone or in hypothetical combination, fail to disclose all of the claimed elements.

Accordingly, for at least this reason, Applicants respectfully request withdrawal of the rejection under Section 103 of independent claims 1, 8, 14, and 21, and provide an indication

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of allowance. Further, Applicants request that the Examiner withdraw the rejection of dependent claims 2-7, 9-13, 15-20, 22-26, and 32-34 based on their respective dependencies and for unique matter recited in each independent claim.

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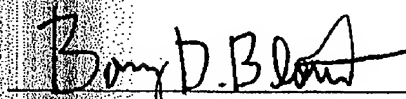
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Conclusion

The Applicants respectfully submit that all pending claims are currently in condition for allowance. However, if the Examiner wishes to resolve any other issues by way of a telephone conference, the Examiner is kindly invited to contact the undersigned attorney at the telephone number indicated below.

Respectfully submitted,

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